What is claimed is:

1. A composition for preparing a polyester/clay nanocomposite, comprising a cyclic ester oligomer and a clay in a ratio of 100 : 0.1 - 10 by weight, in which the cyclic ester oligomer is intercalated between layers of the clay.

2. The composition according to claim 1, wherein the cyclic ester oligomer is one or more oligomers of a polyester selected from the group consisting of poly(ethylene terephthalate), poly(ethylene isophthalate), poly(butylene terephthalate), poly(2,6-dinaphtoate) and poly(ethylene 2,6-naphthalenedicarboxylate).

3. The composition according to claim 1, wherein the clay consists of an anionic phyllosilicate of layered aluminum silicate or magnesium silicate and Na^+ or K^+ ion filled between the layers of the silicate.

4. The composition according to claim 3, wherein the phyllosilicate is selected from the group consisting of montmoillonite, hectorite, saponite, beidellite, nontronite, vermiculite and a halloysite.

5. A polyester/clay nanocomposite, comprising a polyester and a clay in a ratio of 100 : 0.1 - 10 by weight, in which the polyester is intercalated between layers of the clay and a distance between layers of the clay are separated 50 nm or more.

6. The polyester/clay nanocomposite according to claim 5, wherein the polyester is selected from the group consisting of poly(ethylene terephthalate), poly(ethylene isophthalate), poly(butylene terephthalate), poly(2,6-dinaphtoate) and poly(ethylene 2,6-naphthalenedicarboxylate).

7. The polyester/clay nanocomposite according to claim 5, wherein the clay consists of an anionic phyllosilicate of layered aluminum silicate or magnesium silicate and Na^+ or K^+ ion filled between the layers of the silicate.

8. The polyester/clay nanocomposite according to claim 7, wherein the phyllosilicate is selected from the group consisting of montmoillonite, hectorite, saponite, beidellite, nontronite, vermiculite, and a halloysite.

9. A method for preparing a polyester/clay nanocomposite comprising the steps of:

(a) mixing a cyclic ester oligomer with an organically modified clay to obtain a mixture in which the cyclic ester oligomer is intercalated between silicate layers of the clay; and

(b) polymerizing the cyclic ester oligomer intercalated between layers of the clay so as to separate interlayer distance of the clay to 50 nm or more.

10. The method according to claim 9, wherein the polymerization is carried out at 180 - 280°C.

11. The method according to claim 9, wherein the polymerization is carried out

for 5 - 10 minutes.

12. The method according to claim 9, wherein a ratio between the polyester and clay in the polyester/clay nanocomposite is in the range of 100 : 0.1 - 10 by weight.

13. The method according to claim 9, wherein the cyclic ester oligomer is one or more oligomers of a polyester selected from the group consisting of poly(ethylene terephthalate), poly(ethylene isophthalate), poly(butylenes terephthalate), poly(2,6-dinaphtoate) and poly(ethylene 2, 6-naphthalenedicarboxylate).

14. The method according to claim 9, wherein the clay consists of an anionic phyllosilicate of layered aluminum silicate or magnesium silicate and Na^+ or K^+ ion filled between the layers of the silicate.

15. The method according to claim 14, wherein the phyllosilicate is selected from the group consisting of montmoillonite, hectorite, saponite, beidellite, nontronite, vermiculite, and a halloysite.

16. The method according to claim 9, wherein the polymerization in step (b) is carried out by a reaction molding process which is reaction injection molding or reactive extrusion.